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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/013,541	01/26/1998	JOHAN P.M.G. LINNARTZ	PHN16210	3468

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EXAMINER

MEISLAHN, DOUGLAS J

ART UNIT PAPER NUMBER

2132

DATE MAILED: 08/28/2003

35

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/013,541

Applicant(s)

LINNARTZ, JOHAN P.M.G.

Examiner

Douglas J. Meislahn

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment filed 04 August 2003 that amended claims 1, 5, 9, and 11. No arguments were filed with amendment. However, an unentered after-final amendment filed 23 April 2003 presents arguments based on the most-recently entered amendments to the claims. These arguments have been considered.

Claim Objections

2. Claim 5 is objected to because of the following informalities: in claim 5, a word is missing before the second "the" in the second to last line; in claim 9, "contents" should not be pluralized in the second to last line; the first "a" in lines four of claim 11 should be "an" and "bit pattern" should be one word in both line six and seven of the claim; in claims 12 and 13, "verification means" should be "verifying means" (or "verifying means" in claim 11 could be switched to "verification means"); "bit pattern" should be one word in the second line of claim 15; in the last two clauses of claim 15, "generator means" should be "generating means". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 and 11-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 1 recites the limitation "said verification" in the last line. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 11 recites the limitations "the content" and "the medium mark" in the second line, "the first bitpattern" in the third line, "the information carrier" across the last two lines, and "said verification" in the last line. There is insufficient antecedent basis for these limitations in the claim.
7. Claim 15 recites the limitation "the record carrier" twice, across lines two and three and in line four. There is insufficient antecedent basis for this limitation in the claim.
8. Claims 16 and 17 recite the limitation "the encoder means" in their last lines. There is insufficient antecedent basis for this limitation in the claims.
9. Claim 18 recites the limitation "the second medium mark" in the first line. There is insufficient antecedent basis for this limitation in the claim. The claim has been treated as though "second" had been deleted.
10. Claim 19 recites the limitation "the record carrier" in the last line and across the first two lines. There is insufficient antecedent basis for this limitation in the claim.
11. Claim 21 recites the limitation "The system" in its first line. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9, 10, and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As was mentioned in the previous office action, data on a disk is not statutory unless that data is a data structure. A data structure causes a processor to manipulate data in a specific way. This definition is based upon *In re Lowry*. Please see MPEP 2106 IV B. 1. (b).

Response to Arguments

13. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection. While new grounds of rejection are introduced, an examination of applicant's arguments is still germane. Applicant presents three main points with respect to claim 1: reading a first bitpattern from contents of a medium mark is not taught by the prior art; a player that reads a first bitpattern from the medium mark and enabling means responsive to the authenticity of the read first bitpattern and a comparison second bitpattern are unique to the claims; and user information is watermarked with a bitpattern that is related to the contents of the medium mark, a feature not taught by the cited prior art combination.

14. The first of these assertions is true; Oshima et al. present a medium mark, the location of which provides information. There is no information contained within the mark. The examiner said as much in the third paragraph in the previous office action. Applicant's second argument is correct inasmuch as Oshima et al. do not show a first bitpattern in the medium mark. However, Oshima et al. clearly teaches means for reading the medium mark and enabling means (the OK? box in figure 18) that are responsive to a comparison function. Applicant's third point also hinges on Oshima et

al.'s medium mark being devoid of content. Moskowitz most assuredly embeds a digital signature into data. And Oshima et al.'s digital signature is clearly derived from the position information represented by the placement of the medium mark.

15. As such, all three of applicant's arguments are shown to rely on the absence of content within a medium mark. While this feature (or lack thereof) is embodied by Oshima et al. and Moskowitz, other references, Bahns et al. (5607188) for example, teach medium marks that contain content.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshima et al. (5761301) in view of Moskowitz et al. and Bahns et al.

In their abstract, Oshima et al. disclose a medium mark on an optical disk. See part 819b of figure 1 for reading a medium mark from the record carrier. The position information is sent to an encryptor that creates a digital signature of the position information, as described in the abstract. The digital signature reads on applicant's second bitpattern. Figure 18 shows the entire process of forming the digital signature and then verifying it.

Oshima et al. do not say that the digital signature is embedded as a watermark in user information or that applicant's first bitpattern is stored as contents of the medium

mark. In lines 44-57 of column 6, Moskowitz presents embedding digital signatures into content as watermarks. Content is user information in that it is used by the user. This embedding provides nonrepudiation and validation. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to embed the signatures described in Oshima et al. as watermarks into the user information in order to assure nonrepudiation and validity.

In their abstract, Bahns et al. teaches watermarking an optical disc with a name, logo, design, picture, or other pattern which is applied within the structure of a disc. Figure 1 shows an example, with element 20 serving as a watermark for disc 10. This watermark, which is different than the digital watermarks disclosed by Moskowitz, identifies as well as authenticates the disc. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use Bahns et al.'s watermark as the medium mark in Oshima et al. so that the medium mark not only authenticates but also identifies the medium.

Figure 18 of Oshima et al. anticipates the limitations specific to claims 2 and 3. Claim 4 is obvious because signing keys are (supposed to be) unique to devices and the software maker is disclosed as including both the embedding apparatus and the signature generator. Claim 5 contains limitations already discussed in claim 1. Element 819a of Oshima et al.'s first figure meets the first clause of claim 6. Data used to interpret the mark into the first bitpattern reads on applicant's seed and thus the second clause of claim 6 and claim 7.

Moskowitz and Oshima et al. have both taught the benefit of creating digital signatures as a way to secure information. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a cryptographic one-way function to create the first bitpattern, thereby meeting the limitations of claim 8.

The output disc of Oshima et al., when modified by the teachings of Moskowitz, contains the elements of claim 9. Claim 10 is obvious in view of Moskowitz's teaching of a digital signature being used to verify data. As such, it would be obvious to identify the content being watermarked. Claim 11 is covered by the above discussion of claim 1 and figure 18 in Oshima et al. Figure 18 also foresees claim 12. Claim 13 is covered by Moskowitz's discussion of secure hash functions. The limitations of claim 14 are rendered obvious by Moskowitz's discussion of digital signatures.

With respect to claim 15, the recorder has already been shown to possess means for reading the first bit pattern from the record carrier. The presence of this bitpattern in itself indicates a copy protection status, that being that the content is copy protected. The rest of the elements of claim 15 have been discussed above. The content of claims 16 and 17 has already been discussed. Claim 18 is rendered obvious by the abstract of Bahns et al., which teaches watermarking the optical disc at production. This feature also meets the limitations of claim 19. The "OK?" with two exiting paths in figure 18 of Oshima et al. anticipates a switch and thus claims 20 and 21.


Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bahns (5946286), Schiewe (5608718) – abstract, Dohmeier et al. (5495466), and Chandra et al. (4903296).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas J. Meislahn whose telephone number is (703) 305-1338. The examiner can normally be reached on between 9 AM and 6 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barrón can be reached on (703) 305-1830. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


Douglas J. Meislahn
Examiner
Art Unit 2132

DJM